

## **REMARKS**

### **STATUS OF THE CLAIMS**

Claims 1, 3-11, 13-25, 27-35, and 38-46 are pending. By this Amendment, claims 1, 4, 11, 18, 25, 28, 35 and 45 have been amended and claim 37 has been cancelled. Support for these amendments can be found in the originally filed specification, for example, at paras. [0008], [0016], [0024], [0032], and [0037]. Claim 35 has been amended to correct a typographical error and to further define the additive package. Support for this amendment can be found in original claim 37 and the originally filed specification, for example, at paras. [0030] and [0059]. No new matter has been added.

### **REJECTIONS UNDER 35 U.S.C. § 103**

**A.     The Examiner has rejected claims 1-46 under 35 U.S.C. § 103(a) over U.S. Patent No. 5,942,470 to Norman et al. ("Norman")**

Applicant respectfully disagrees with the Examiner's position that *Norman* teaches or suggests an additive package which yields a lubricating oil having sulfur content less than about 0.3 wt% and a phosphorus content less than about 0.11 wt%. However, in order to advance prosecution, independent claims 1, 11, and 25 have been amended to recite that the claimed additive package also yields a lubricating oil having "an ash content of less than about 1.2 wt%". Independent claim 35 has also been amended to recite that the claimed additive package is "essentially free of sulfurized phenate." Applicant respectfully submits that the Examiner has failed to establish a

prima facie case of obviousness because the cited reference does not teach or suggest all of the claim elements as presently recited in independent claims 1, 11, 25 and 35.

Applicant respectfully traverses the rejection for the reasons already of record as well as those presented below.

1. **Norman does not teach or suggest the claimed sulfur content, phosphorus content, and ash content in a fully finished composition**

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The Examiner has relied on *Norman* for teaching "gear oil and gear oil additive concentrates which comprise (i) at least one oil-soluble sulfur-containing extreme pressure or antiwear agent, (ii) at least one oil-soluble amine salt of a partial ester of an acid of phosphorous, and (iii) at least one oil-soluble succinimide ashless dispersant, wherein the proportions of (i):(ii):(iii) on a weight basis is (1-5):(0.1-3):(0.05-4)." See Office Action dated October 27, 2006 at page 2, and col. 19, lines 1-10 of *Norman*. The Examiner has argued that "the amount of sulfur from component (i) may be from 0.1-0.5 wt.% which meets the claim limit of less than about 0.3 wt.%." See Office Action dated February 15, 2006 at page 4. The Examiner has stated that "component (ii) of *Norman* meets the limitation in the claims of the alkylamine salt of a dialkylmonothiophosphate component." See Office Action dated July 27, 2005, at 2. The Examiner has further argued that "the specification on p. 19 adds 0.675 wt.% phos. component and *Norman* adds 0.1-3 wt.% of the same component. Thus, the phosphorus content of the *Norman* ref. must be within the claimed range of less than 0.11 wt.%." See Advisory Action dated May 9, 2006.

However, the feature describing the ash content presently recited in independent claims 1, 11, 25, and 45 was previously recited in dependent claims 4, 18, 28, and 38,

inter alia. None of the Office Actions to date have addressed this feature. Moreover, Applicant notes that the presently claimed combination of sulfur content, phosphorus content, and ash content is not contemplated or suggested in *Norman*. As such, independent claims 1, 11, 25, and 45 are patentably distinguishable over *Norman*.

2. **Norman does not teach or suggest an oil soluble lubricant additive package which is essentially free of sulfurized phenate**

Independent claim 35 recites an oil soluble additive package which is "essentially free of sulfurized phenate." Applicant notes that *Norman* is silent on this point. Therefore, *Norman* does not teach or suggest the subject matter of the claim. For at least this reason, independent claim 35 is allowable over *Norman*.

3. **Omitting component (i) of Norman is improper**

The Examiner has relied upon *Ex parte Wu* to support her argument that the sulfur-containing extreme pressure agent, component (i) could be eliminated from *Norman*. Applicant respectfully submits that *Ex parte Wu* does not support the Examiner's rationale for an obviousness rejection. *Ex parte Wu* is inapplicable to the present case because the present facts and the facts of *Ex parte Wu* are not similar. "If the facts in a prior legal decision are sufficiently similar to those in an application under examination, the examiner may use the rationale used by the court." MPEP § 2144.

In *Ex parte Wu*, the claims were rejected over a combination of references. Specifically, the claims were rejected over a primary reference which disclosed an anticorrosion composition of epoxy resin, hydrocarbon diluent, and polybasic acid salts wherein said salts were taught to be beneficial when employed in a freshwater environment, in view of secondary references which clearly suggested the addition of

petroleum sulfonate to corrosion inhibiting compositions. See *Ex parte Wu*, 10 USPQ 2031 (Bd. Pat. App. & Inter. 1989). However, the Examiner has not presently rejected the pending application over a combination of references. Rather, the Examiner has only rejected the present application over a single primary reference, *Norman*. Therefore, the facts are insufficiently similar to support an obviousness rejection by resorting to the same rationale used by the court in *Ex parte Wu*.

Furthermore, component (i) is disclosed as an element of *Norman's* composition. A primary goal of *Norman* is to "provide additive systems capable of rendering improved service for long periods of time." Col. 1, lines 35-36. To omit component (i) from *Norman* would destroy the invention for its intended purpose, and thus it would not have been obvious to do so. See MPEP § 2141.01(V); see also *Ex parte Kaiser*, 189 U.S.P.Q. 816 (Bd. Pat. App. & Inter. 1974) (omission of feature claimed in reference is not obvious if such omission clearly contravenes the objective taught by the reference); *In re Gordon*, 221 U.S.P.Q. 1125 (Fed. Cir. 1984).

Moreover, the antiwear agent of component (i) is recited in each of *Norman's* independent claims, and the reference never teaches or suggests that this component can be omitted. Thus, it would be improper to modify *Norman* to omit component (i), absent any suggestion or motivation provided in the reference to do so. *ACS Hospital Systems, Inc. v. Monefiori Hospital*, 732 F.2d 1572, 221 U.S.P.Q. 929,933 (Fed. Cir. 1984) ("If modifications to a prior art reference are required to arrive at a prima facie case, the prior art must supply the motivation or incentive to make the modifications."); *In re Mills*, 916 F.2d 680, 682, 16 U.S.P.Q.2d 1430,1432 (Fed. Cir. 1990). For at least these reasons, it would be improper to modify *Norman* to omit component (i).

For each of the reasons discussed above, the pending claims are not rendered obvious by *Norman*. Accordingly, reconsideration and withdrawal of this rejection is respectfully requested.

**B. The Examiner has rejected claims 25, 27-35, and 37-46 under 35 U.S.C. § 103(a) over U.S. Patent No. 5,342,531 to Walters et al. ("Walters")**

Applicant respectfully submits that the Examiner has failed to establish a prima facie case of obviousness because the cited reference does not teach or suggest all of the claim elements. Applicant respectfully traverses the rejection for the reasons already of record as well as those presented below.

**1. Walters does not teach the claimed sulfur content, phosphorus content, and ash content in a fully finished composition**

The Examiner has argued that *Walters* teaches that the sulfur-containing extreme pressure or antiwear agent, component (a), is dissolved in a lubricating oil in an amount "usually between 0.01 and 2.0 % by weight, and preferably from 0.02 to 0.4% by weight, based on the total weight of the solution." See Office Action dated October 27, 2006, at 6, and *Walters* col. 2, lines 17-20. The Examiner has stated that "component (b) meets the limitation of the at least one alkylamine salt of a dialkylmonothiophosphate component of the claims." See Office Action dated July 27, 2005, at 3 (citations to *Walters* omitted). The Examiner has further argued that "Example I in column 9 of *Walters* sets forth a polyalkylene glycol composition containing three phosphorus-containing components: 0.13% of C12-14 tertiary alkyl primary amine salt of dibutylthiophosphoric acid, 0.11% of oleylamine salt of

dibutylthiophosphoric acid, and 0.27% of oleylamine salt of amyl acid phosphate." See Office Action dated October 27, 2006 at page 7.

However, as stated above in *Norman*, the ash content presently recited in independent claims 1, 11, and 25 was previously recited in dependent claims 4, 18, 28, and 38 and has not been addressed in any of the previous Office Actions. Moreover, the presently claimed combination of sulfur content, phosphorus content, and ash content is not discussed, contemplated, or suggested in *Walters*. As such, independent claims 1, 11, and 25 are patentably distinguishable over *Walters*.

Similarly, independent claim 45 presently recites a method of achieving a low sulfur, low ash, and low phosphate oil formulation comprising a lubricating oil having "a sulfur content less than about 0.3 wt%, a phosphorus content of less than about 0.11 wt%, and an ash content less than about 1.2 wt%." For at least the reasons discussed above, *Walters* does not teach or suggest a lubricating oil having all three properties (e.g., the claimed phosphorus content, the claimed sulfur content, and the claimed ash content). Thus, *Walters* does not teach or suggest the subject matter of independent claim 45. As such, independent claim 45 is also allowable over *Walters*.

2. **Walters does not teach or suggest the claimed sulfur and phosphorus content in an oil soluble lubricant additive package**

As discussed above, the Examiner has relied upon *Walters* for teaching that component (a) is dissolved in a lubricating oil in an amount "usually between 0.01 and 2.0 % by weight, and preferably from 0.02 to 0.4% by weight, based on the total weight of the solution." See Office Action dated October 27, 2006 at page 6. However, this is not a teaching or suggestion of the sulfur and phosphorus content in the additive

package. In fact, *Walters* is silent regarding the sulfur and phosphorus content in the additive package of its invention. Therefore, the reference does not teach or suggest any particular range of sulfur or phosphorus content in an additive package, much less a sulfur content less than about 3 wt.% and a phosphorus content of less than about 1.2 wt.%, as presently recited in independent claim 35. For at least this reason, *Walters* does not teach or suggest the claimed sulfur content in an additive package and does not render obvious the claimed invention. Thus, independent claim 35 is patentably distinguishable over *Walters*.

3. **Walters does not teach or suggest an oil soluble lubricant additive package which is essentially free of sulfurized phenate**

Independent claim 35 recites an oil soluble additive package which is "essentially free of sulfurized phenate." Applicant notes that this feature not addressed at all in *Walters*. Therefore, the reference does not teach or suggest the subject matter of the claim. For at least this reason, independent claim 35 is allowable over *Walters*.

4. **Omitting component (a) of Walters is improper**

The Examiner has relied upon *Ex parte Wu* to support her argument that the sulfur-containing extreme pressure or antiwear agent, component (a), could be eliminated from *Walters*. For the reasons discussed above in *Norman*, Applicant respectfully submits that *Ex parte Wu* does not support the Examiner's rationale for an obviousness rejection. *Ex parte Wu* is inapplicable to the present case because the present facts are insufficiently similar to those in *Ex parte Wu*.

For at least the foregoing reasons, *Walters* does not render obvious the claimed invention. Reconsideration and withdrawal of the rejection are respectfully requested.

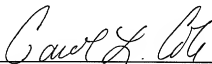
**CONCLUSION**

In view of the foregoing amendments and remarks, Applicant respectfully requests favorable reconsideration of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to deposit account 50-2961

Respectfully submitted,

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